W. K. BUSHNELL.

SULKY ATTACHMENT FOR PLOWS.

No. 190,737. Patented May 15, 1877.

Fig. 1.

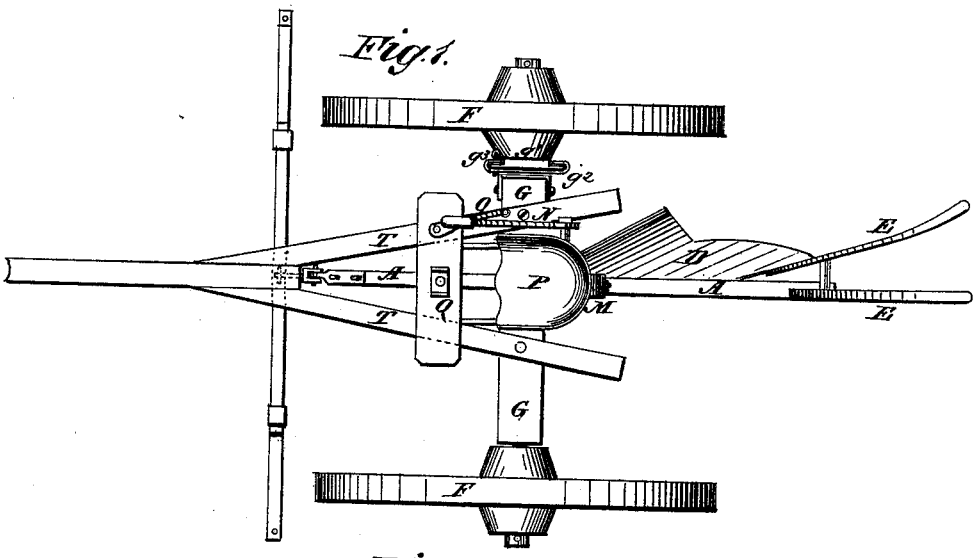


Fig. 2.

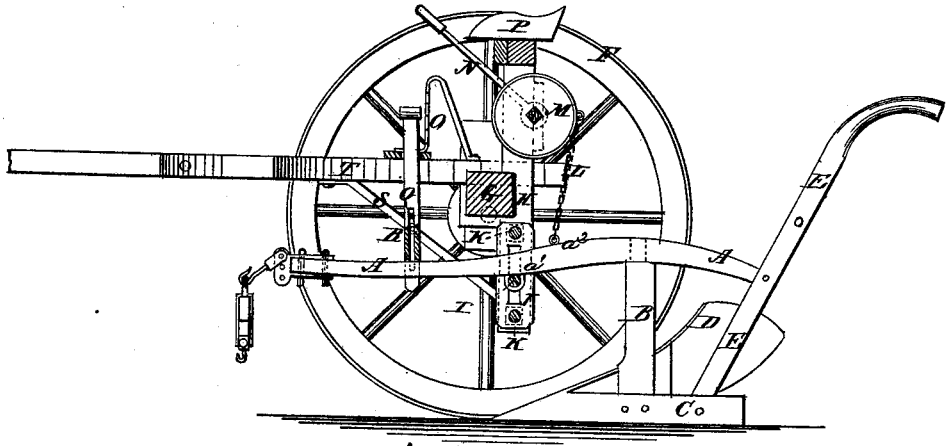
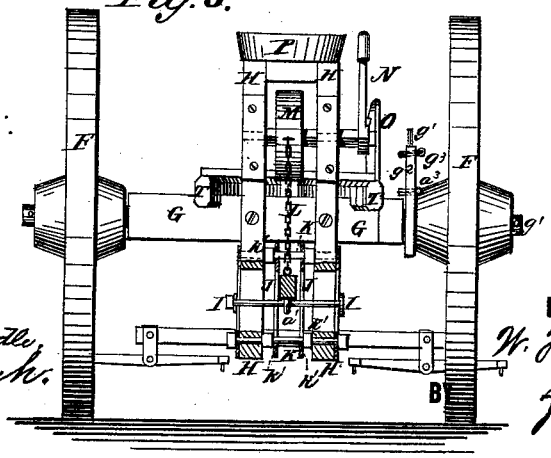


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM K. BUSHNELL, OF BURLINGTON, WISCONSIN.

IMPROVEMENT IN SULKY ATTACHMENTS FOR PLOWS.

Specification forming part of Letters Patent No. **190,737**, dated May 15, 1877; application filed March 24, 1877.

To all whom it may concern:

Be it known that I, WILLIAM KOSSUTH BUSHNELL, of Burlington, in the county of Racine and State of Wisconsin, have invented a new and useful Improvement in Sulky Attachment for Plows, of which the following is a specification:

Figure 1 is a top view of my improved attachment, shown as applied to a plow. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a rear view of the same, part being broken away to show the construction.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved sulky attachment for plows, which shall be so constructed as to leave the plow free to run in and out of the ground, to prevent it from wabbling, and to enable it to be readily controlled.

The invention consists in the combination of the parallel-slotted upright, the three bolts, the slotted plates, and the keeper, with the wheels and axle, and the plow-beam.

A is the beam, B is the standard, C is the land-side, D is the mold-board, and E are the handles, of an ordinary plow. F are the wheels, which revolve upon the journals of the axle G, and are made of such a size as to bring the axle G to such a height above the plow-beam A as will allow the plow to be raised out of the ground.

The inner end of one of the journals g^1 is flattened, and is bent upward at right angles to fit against an upright plate, g^2, attached to the end of the axle G, and upon the side edges of which are formed hook-flanges to receive the edges of the upright arm of the journal g^1. The journal g^1 is held in any position into which it may be adjusted by a pin, g^3, that passes through the widened arm of the said journal g^1 and through the said plate g^2, several holes being formed to receive the said pin g^3, so that the machine may be adjusted to run level whether both wheels be running upon the unplowed land or one of them be running in a furrow.

To the rear side of the axle G are bolted two parallel uprights, H, projecting below and above said axle. The parts of the uprights H below the axle G are slotted longitudinally to receive the bolt I, and allow it to play up and down freely. The bolt I passes through a keeper, a^1, attached to the lower side of the beam A.

The beam A passes between two parallel plates, J, placed between the uprights H, slotted longitudinally for the passage of the bolt I, and supported by two bolts, K, passing through the ends of the plates J, and through the uprights H.

The plates J are held in place upon the bolts K by nuts k' screwed upon the said bolts at the outer sides of the said plates, so that by adjusting the nuts k' the plow may be adjusted to take or leave land, as may be desired. The plates J also prevent the plow-beam from having a lateral movement or wabbling.

To the upper side of the beam A, a little in the rear of the keeper a^1, is attached an eye screw or bolt, a^2, to which is attached the lower end of a chain, L, the upper end of which is attached to a wheel, M, pivoted to and between the upper parts of the uprights H.

To one of the journals of the wheel M is attached a lever, N, by which the wheel M and chain L are operated to raise the plow from the ground.

The lever N, when raising the plow from the ground, moves along a notched catch-bar, O, attached to the tongue, hounds, or frame of the machine, and by which the said lever is held in any position into which it may be adjusted.

P is the driver's seat, which is attached to the upper ends of the uprights H. Q is a bar that passes down through a hole in the foot-board, and may have a fork or other foot-rest attached to its upper end. The lower end of the bar Q is notched to receive and fit upon the forward part of the beam A, so that the driver, by pressing the bar Q down with his foot, can cause the plow to enter or run deeper in the ground.

The bar Q is slotted longitudinally to receive a pin or bolt, R, attached to the braces S to keep the bar Q in place while allowing it to move up and down with the beam A.

The braces S are designed to strengthen the lower parts of the uprights H, and their

upper ends are attached to the hounds or frame T, and their lower ends are attached to the lower parts of the said uprights H.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the parallel slotted uprights H, the three bolts K I K, the slotted plates J, and the keeper a^1, with the wheels and axle F G, and the plow-beam A, substantially as herein shown and described.

WILLIAM K. BUSHNELL.

Witnesses:
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